



2881
— \$

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Mihrimah Ozkan et al. Art Unit: 2881
Serial No.: 09/917,139 Examiner: Zia R. Hashmi
Filed : July 26, 2001
Title : MANIPULATION OF LIVE CELLS AND INORGANIC OBJECTS
WITH OPTICAL BEAM ARRAYS

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Applicants call attention to the attached Information
Disclosure Statement and documents listed on form PTO-1449.

This filing is being made before the receipt of a first
Office action on the merits. No fee is required.

Kindly accept this Information Disclosure Statement under
Rule 97(c)(2). The rule 17(p) certification fee of \$180 is
enclosed.

Each enclosed document listed on the herewith Form PTO-1449
was cited in the attached **Type here** Search Report dated
Type here, issued in a foreign counterpart application not more

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being
deposited with the United States Postal Service as first class mail with
sufficient postage on the date indicated below and is addressed to the
Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date of Deposit

December 22, 2004

Signature

Teri Barnett

Typed or Printed Name of Person Signing Certificate

Teri Barnett

than three months ago. To the best knowledge of the undersigned, this is the first citation of these items in any communication from a foreign patent office in a counterpart foreign application.

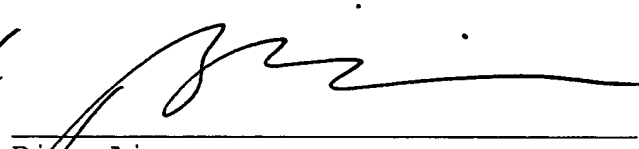
The documents are in the English language; hence no concise explanation is necessary per Rule 98(a)(3).

Consideration of the foregoing and enclosures plus the return of a copy of the enclosed form PTO-1449 with the Examiner's initials in the left column per MPEP 609 are earnestly solicited along with an early action on the merits.

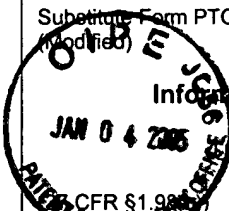
Please apply any additional charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: Dec. 22, 2004


Bing Ai
Reg. No. 43,312

Fish & Richardson P.C.
USPTO Customer No. 20985
12390 El Camino Real
San Diego, CA 92130
Telephone: (858) 678-5070
Facsimile: (858) 678-5099

Substitute Form PTO-1449 (modified)  Information Disclosure Statement by Applicant (Use several sheets if necessary)	U.S. Department of Commerce Patent and Trademark Office		Attorney's Docket No. 15670-036001	Application No. 09/917,139
	Applicant Mihrimah Ozkan et al.			
	Filing Date July 26, 2001		Group Art Unit 2881	

U.S. Patent Documents

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	3,558,877	01/26/71	Pressman			
	AB	3,628,182	12/14/71	Ashkin et al.			
	AC	3,638,139	01/25/72	Ashkin et al.			
	AD	3,662,183	05/09/72	Ashkin et al.			
	AE	3,725,810	04/03/73	Ashkin et al.			
	AF	3,761,721	09/25/73	Altshuler et al.			
	AG	3,778,612	12/11/73	Ashkin			
	AH	3,793,541	02/19/74	Ashkin et al.			
	AI	3,808,432	04/30/74	Ashkin			
	AJ	3,808,550	04/30/74	Ashkin			
	AK	4,063,106	12/13/77	Ashkin et al.			
	AL	4,092,535	05/30/78	Ashkin et al.			
	AM	4,127,329	11/28/78	Chang et al.			
	AN	4,247,815	01/27/81	Larson et al.			
	AO	4,253,846	03/03/81	Smythe et al.			
	AP	4,327,288	04/27/82	Ashkin et al.			
	AQ	4,386,274	05/31/83	Altshuler			
	AR	4,390,403	06/28/83	Batchelder			
	AS	4,440,638	04/03/84	Judy et al			
	AT	4,451,412	05/29/84	Loiseaux et al			
	AU	4,453,805	06/12/84	Ashkin et al			
	AV	4,520,484	05/28/85	Huignard et al			
	AW	4,536,657	08/20/85	Bruel			
	AX	4,627,689	12/09/86	Asher			
	AY	4,632,517	12/30/86	Asher			
	AZ	4,756,427	07/12/88	Göhde			
	AAA	4,827,125	05/02/89	Goldstein			

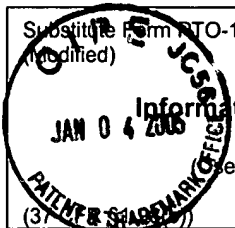
Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Substitute Form PTO-1449 (Modified) 	U.S. Department of Commerce Patent and Trademark Office		Attorney's Docket No. 15670-036001	Application No. 09/917,139
	Information Disclosure Statement by Applicant (Use several sheets if necessary)			
	Applicant Mihrimah Ozkan et al.		Filing Date July 26, 2001	Group Art Unit 2881

U.S. Patent Documents

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	ABB	4,886,360	12/12/89	Finlan			
	ACC	4,887,721	12/19/81	Martin et al			
	ADD	4,893,886	01/16/90	Ashkin			
	AEE	4,908,112	03/13/90	Pace			
	AFF	5,029,791	07/09/91	Ceccon et al			
	AGG	5,079,169	01/07/92	Chu et al			
	AHH	5,100,627	03/31/92	Buican et al			
	AII	5,113,286	05/12/92	Morrison			
	AJJ	5,121,400	06/09/92	Verdiell et al			
	AKK	5,170,890	12/15/92	Wilson et al			
	ALL	5,189,294	02/23/93	Jackson et al			
	AMM	5,198,369	03/30/93	Itoh et al			
	ANN	5,206,504	04/27/93	Sridharan			
	AOO	5,212,382	05/18/93	Sasaki et al			
	APP	5,245,466	09/14/93	Burns et al			
	AQQ	5,274,231	12/28/93	Chu et al			
	ARR	5,283,417	02/01/94	Misawa et al			
	ASS	5,308,976	05/03/94	Misawa et al			
	ATT	5,327,515	07/05/94	Anderson et al			
	AUU	5,337,324	08/09/94	Ohtsu et al			
	AVV	5,338,930	08/16/94	Chu et al			
	AWW	5,343,038	08/30/94	Nishiwaki et al			
	AXX	5,355,252	10/11/94	Haraguichi			
	AYY	5,360,764	11/01/94	Celotta et al			
	AZZ	5,363,190	11/08/94	Inaba et al			
	AAAA	5,364,744	11/15/94	Buican et al			
	ABBB	5,374,566	12/20/94	Iranmanesh			

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Substitute Form PTO-1449 (modified)  (37)	U.S. Department of Commerce Patent and Trademark Office		Attorney's Docket No. 15670-036001	Application No. 09/917,139
	Information Disclosure Statement by Applicant (See several sheets if necessary)			
	Applicant Mihrimah Ozkan et al.		Filing Date July 26, 2001	Group Art Unit 2881

U.S. Patent Documents

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	ACCC	5,445,011	08/29/95	Ghislain et al			
	ADDD	5,452,123	09/19/95	Asher et al			
	AEEE	5,473,471	12/05/95	Yamagata et al			
	AFFF	5,495,105	02/27/96	Nishimura et al			
	AGGG	5,512,745	04/30/96	Finer et al			
	AHHH	5,620,857	04/15/97	Weetall et al			
	AIII	5,625,484	04/29/97	Coutsomitrans			
	AJJJ	5,629,802	05/13/97	Clark			
	AKKK	5,631,141	05/20/97	Sonek et al			
	ALLL	5,637,458	06/10/97	Frankel et al			
	AMMM	5,644,588	07/01/97	Misawa			
	ANNN	5,653,859	08/05/97	Parton et al			
	AOOO	5,659,561	08/19/97	Torruellas et al			
	APPP	5,674,743	10/7/97	Ulmer			
	AQQQ	5,689,109	11/18/97	Schutze			
	ARRR	5,694,216	12/02/97	Riza			
	ASSS	5,760,395	06/02/98	Johnstone			
	ATTT	5,770,856	06/23/98	Fillard et al			
	AUUU	5,773,298	06/30/98	Lynggaard et al			
	AVVV	5,776,674	07/07/98	Ulmer			
	AWWW	5,793,485	08/11/98	Gourley			
	AXXX	5,795,457	08/18/98	Pethig et al			
	AYYY	5,804,436	09/08/98	Okun et al			
	AZZZ	5,814,200	09/29/98	Pethig et al			
	AAAAA	5,858,192	01/12/99	Becker et al			
	ABBBB	5,888,370	03/30/99	Becker et al			
	ACCCC	5,900,160	05/04/99	Whitesides et al			

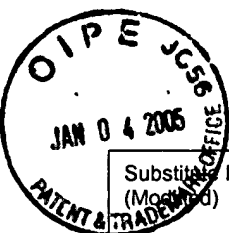
Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Substitute Form PTO-1449 (Modified) Information Disclosure Statement by Applicant (Use several sheets if necessary) 37 CFR § 1.901(a)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 15670-036001	Application No. 09/917,139
		Applicant Mihrimah Ozkan et al.	
		Filing Date July 26, 2001	Group Art Unit 2881

U.S. Patent Documents

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	ADDDD	5,919,646	07/06/99	Okun et al			
	AEEEE	5,935,507	08/10/99	Morito et al			
	AFFFF	5,939,716	08/17/99	Neal			
	AGGGG	5,942,443	08/24/99	Parce et al			
	AHHHH	5,950,071	09/07/99	Hammond et al			
	AIIII	5,952,651	09/14/99	Morito et al			
	AJJJJ	5,953,166	09/14/99	Shikano et al			
	AKKKK	5,956,106	09/21/99	Petersen et al			
	ALLLL	5,993,630	11/30/99	Becker et al			
	AMMMM	5,993,631	11/30/99	Parton et al			
	ANNNN	5,993,632	11/30/99	Becker et al			
	AOOOO	6,015,714	01/18/00	Baldarelli et al			
	APPPP	6,033,546	03/07/00	Ramsey			
	AQQQQ	6,071,394	06/06/00	Cheng et al			
	ARRRR	6,074,725	06/2000	Kennedy, Colin			
	ASSSS	6,078,681	06/20/00	Silver			
	ATTTT	6,082,205	07/04/00	Zborowski et al			
	AUUUU	6,088,097	07/11/00	Uhl			
	AVVVV	6,088,376	07/11/00	O'Brien et al			
	AWWWW	6,096,509	08/01/00	Okun et al			
	AXXXX	6,111,398	08/29/00	Graham			
	AYYYY	6,121,603	09/19/00	Hang et al			
	AZZZZ	6,139,831	10/31/00	Shivashankar et al			
	AAAAAA	6,142,025	11/07/00	Zborowski et al			
	ABBBBB	6,143,558	11/07/00	Kopelman et al			
	ACCCCC	6,149,789	11/21/00	Benecke et al			
	ADDDDD	6,159,749	12/12/00	Liu			

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

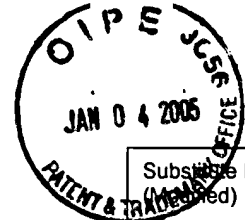


Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 15670-036001	Application No. 09/917,139
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Mihrimah Ozkan et al.	
		Filing Date July 26, 2001	Group Art Unit 2881

U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AEEEEEE	6,197,176	03/06/01	Pethig et al			
	AFFFFF	6,208,815	03/27/01	Seidel et al			
	AGGGGG	6,215,134	04/10/01	O'Brien et al			
	AHHHHH	6,221,654	04/24/01	Quake et al			
	AIIIII	6,224,732	05/01/01	Imasaka et al			
	AJJJJJ	6,242,209	06/05/01	Ransom et al			
	AKKKKK	6,280,960	08/28/01	Carr			
	ALLLLL	6,280,967	08/28/01	Ransom et al			
	AMMMMM	6,287,758	09/11/01	Okun et al			
	ANNNNN	6,287,776	09/11/01	Hefti et al			
	AOOOOO	6,287,832	09/11/01	Becker et al			
	APPPPP	6,287,874	09/11/01	Hefti			
	AQQQQQ	6,294,063	09/25/01	Becker et al			
	ARRRRR	6,344,325	02/05/02	Quake et al			
	ASSSSS	6,399,397	06/04/02	Zarling et al			
	ATTTTT	6,488,895	12/2002	Kennedy, Colin			
	AUUUUU	6,509,085	01/2003	Kennedy, Colin			
	AVVVVV	6,514,722	02/04/03	Palsson et al			
	AWWWWW	2002/0058332	05/16/02	Quake et al			
	AXXXXX	2002/0005354	01/17/02	Spence et al.			
	AYYYYY	2002/0094533	07/18/02	Hess et al.			
	AZZZZZ	2002/0045272	04/18/02	McDevitt et al.			
	AAAAAAA	2003/0047676	03/13/03	Grier et al			

Foreign Patent Documents or Published Foreign Patent Applications								
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	ABBBBBB	97/21832	06/19/97	WO				

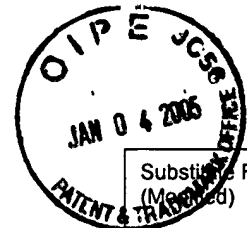
Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	



Substitute Form PTO-1449 (Mailed)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 15670-036001	Application No. 09/917,139
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Mihrimah Ozkan et al.	
		Filing Date July 26, 2001	Group Art Unit 2881

Foreign Patent Documents or Published Foreign Patent Applications								
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	ACCCCCC	99/39190	08/05/99	WO				
	ADDDDDD	99/61888	12/02/99	WO				
	AEEEEEE	00/23825	04/27/00	WO				
	AFFFFFF	00/45160	08/03/00	WO				
	AGGGGGG	00/45170	08/03/00	WO				
	AHHHHHH	00/45179	08/03/00	WO				
	AIIIIII	94/08221	04/14/94	WO				
	AJJJJJJ	00/54882	09/21/00	WO				
	AKKKKKK	01/05514	01/25/01	WO				
	ALLLLLL	01/09606	02/08/01	WO				
	AMMMMMM	01/11333	02/15/01	WO				
	ANNNNNN	01/14870	03/01/01	WO				
	AOOOOOO	01/20329	03/22/01	WO				
	APPPPPP	01/32930	05/10/01	WO				
	AQQQQQQ	01/40454	06/07/01	WO				
	ARRRRRR	01/40769	06/07/01	WO				
	ASSSSSS	01/44852	06/21/01	WO				
	ATTTTTT	01/68110	09/20/01	WO				
	AUUUUUU	02/22774	03/21/02	WO				
	AVVVVVV	4326181	02/09/95	DE				
	AWWWWWW	0635994	09/23/98	EP				
	AXXXXXX	0556748	10/28/98	EP				
	AYYYYYY	0898493	01/19/00	EP				
	AZZZZZZ	03101419	04/26/91	JP				
	AAAAAAA	05088107	04/09/93	JP				
	ABBBBBB	05232398	09/10/93	JP				
	ACCCCCC	06123886	05/06/94	JP				

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	



Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 15670-036001	Application No. 09/917,139
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Mihrimah Ozkan et al.	
		Filing Date July 26, 2001	Group Art Unit 2881

Foreign Patent Documents or Published Foreign Patent Applications								
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	ADDDDDDD	06132000	05/13/94	JP				
	AEEEEEEE	08234110	09/13/96	JP				
	AFFFFFFF	09043434	02/14/97	JP				
	AGGGGGGG	10048102	02/20/98	JP				
	AHHHHHHH	10062332	03/06/98	JP				
	AIIIIIII	11218691	08/10/99	JP				

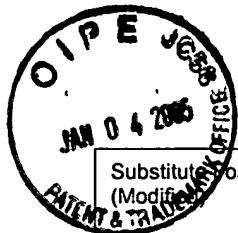
Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	



Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 15670-036001	Application No. 09/917,139
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Mihrimah Ozkan et al.	
		Filing Date July 26, 2001	Group Art Unit 2881

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	AJJJJJJ	ACKERSON et al, "Radiation Pressure As A Technique For Manipulating The Particle Order In Colloidal Suspensions", Faraday Discuss. Chem. Soc., 83, 1987, 309-316
	AKKKKKKK	AFZAL et al, "Optical Tweezers Using A Diode Laser", Rev. Sci. Instrum., 63, 4, April 1992, 2157-2163
	ALLLLLLL	AMATO, "Optical Matter Emerges Under Laser", Science News, 136, 1989, 212
	AMMMMMMM	ASHER et al, "Crystalline Colloidal Bragg Diffraction Devices: The Basis For A New Generation Of Raman Instrumentation", Spectroscopy, 1, 12, 1986, 26-31
	ANNNNNNN	ASHKIN, "Acceleration & Trapping Of Particles by Radiation Pressure", Physical Review Letters, 24, 4, January 26, 1970, 156-159
	AOOOOOOO	ASHKIN, "Trapping Of Atoms By Resonance Radiation Pressure", Physical Review Letters, 40, 12, March 20, 1978, 729-732
	APPPPPPP	ASHKIN, "Forces Of A Single Beam Gradient Laser Trap On A Dielectric Sphere In The Ray Optics Regime", Biophys.J., 61, February 1992, 569-582
	AQQQQQQQ	ASHKIN et al, "Force Generation Of Organelle Transport Measured In Vivo By An Infrared Laser Trap", Nature, 348, 11/22/90, 346-348
	ARRRRRRR	ASHKIN et al, "Internal Cell Manipulation Using Infrared Laser Traps", Proc. Natl. Acad. Sci. USA, 86, 20, October 1989, 7914-7918
	ASSSSSSS	ASHKIN et al., "Optical Levitation By Radiation Pressure", Appl.Phys.Lett., 19, 8, October 15, 1971, 283-285
	ATTTTTTT	ASHKIN, "Optical Trapping & Manipulation Of Neutral Particles Using Lasers", Proc.Natl.Acad.Sci.USA, 94, 10, May 13, 1997, 4853-4860
	AUUUUUUU	AVIVA website printout, www.avivabio.com
	AVVVVVVV	BAGNATO et al, "Continuous Stopping & Trapping Of Neutral Atoms", Physical Review Letters, 58, 21, May 25, 1987, 2194-2197
	AWWWWWWW	BECKER et al, "Separation Of Human Breast Cancer Cells From Blood By Differential Dielectric Affinity", Proc. Natl. Acad. Sci. USA, 92, January 1995, 860-864
	AXXXXXXX	BERNS et al, "Use Of A Laser Induced Optical Force Trap To Study Chromosome Movement On the Mitotic Spindle", Proc. Natl. Acad. Sci. USA, 86, 12, June 1989, 4539-4543
	AYYYYYYY	BERNS et al, "Laser Microbeam As A Tool In Cell Biology: A Survey Of Cell Biology", International Review Of Cytology, 129, 1991, 1-44 (Academic Press: San Diego)
	AZZZZZZZ	BIEGELOW et al, "Observation Of Channeling Of Atoms In The Three Dimensional Interference Pattern Of Optical Standing Waves", Physical Review Letters, 65, 1, July 2, 1990, 29-32
	AAAAAAAAA	BLOCK et al., "Compliance Of Bacterial Flagella Measurement Without Optical Tweezers", Nature, 338, 6215, April 6, 1989, 514-518
	ABBBBBBBB	BLOCK, "Optical Tweezers: A New Tool For Biophysics", Noninvasive Techniques In Cell Biology, chap 15, 1990, 375-402. (Wiley-Liss Inc.: New York)

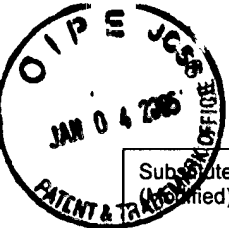
Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	



Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 15670-036001	Application No. 09/917,139
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Mihrimah Ozkan et al.	
		Filing Date July 26, 2001	Group Art Unit 2881

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	ACCCCCCCC	BRONKHORST et al., "A New Method To Study Shape Recovery Of Red Blood Cells Using Multiple Optical Trapping", Biophys. J., 69, 5, November 1995, 1666-1673
	ADDDDDDDD	BUICAN et al., "Automated Single Cell Manipulation & Sorting By Light Trapping", Applied Optics, 26, 24, December 15, 1987, 5311-5316
	AEEEEEEEE	BURNS et al., "Optical Binding", Physical Review Letters, 63, 12, September 18, 1989, 1233-1236
	AFFFFFFFF	BURNS et al., "Optical Matter: Crystallization & Binding In Intense Optical Fields", Science, 249, 4970, August 17, 1990, 749-754
	AGGGGGGGG	BUSINESS WEEK, "Is There Anything A Laser Can't Do?", Business Week, October 30, 1989, 157
	AHHHHHHHH	BUSTAMANTE, "Direct Observation & Manipulation Of Single DNA Molecules Using Fluorescence Microscopy", Annu. Rev. Biophys. Biophys. Chem., 20, 1991, 415-446
	AIIIIIII	BUSTAMANTE et al., "Towards A Molecular Description Of Pulsed Field Gel Electrophoresis", Trends In Biotechnology, 11, 1993, 23-30
	AJJJJJJJJ	BUSTAMANTE et al., "Manipulation Of Single DNA Molecules & Measurement Of Their Persistence, Length & Charge Density Under A Fluorescence Microscope", Abst. Of the 19th Mtg. Of Annual Mtg. Of Amer. Soc. For Photobiology, 53, June 22, 1991, 46S (Pergamon Press: Oxford).
	AKKKKKKKK	CALDWELL, "Field-Flow Fractionation", Analytical Chemistry, 60, 17, September 1, 1988, 959-971
	ALLLLLLLL	CHIOU et al., "Interferometric Optical Tweezers", Optics Communications, 133, January 1, 1997, 7-10
	AMMMMMMMM	CHOU et al., "A Microfabricated Device for Sizing & Sorting DNA Molecules", Proc. Natl. Acad. Sci. USA, 96, January 1999, 11-13
	ANNNNNNNN	CHOWDHURY et al., "Laser Induced Freezing", Physical Review Letters, 55, 8, August 19, 1985, 833-836
	AOOOOOOOO	CHOWDHURY et al., "All Optical Logic Gates Using Colloids", Microwave & Optical Technology Letters, 1, 5, July 1988, 175-178
	APPPPPPPP	CHOWDHURY et al., Exchange of Letters, Science, 252, May 24, 1991
	AQQQQQQQQ	CHU et al., "Experimental Observation Of Optically Trapped Atoms", Physical Review Letters, 57, 3, July 21, 1986, 314-317
	ARRRRRRRR	CLARK et al., "Single Colloidal Crystals", Nature, 281, 5726, September 6, 1979, 57-60
	ASSSSSSSS	CROCKER et al., "Microscopic Measurement Of The Pair Interaction Potential Of Charge Stabilized Colloid", Physical Review Letters, 73, 2, July 11, 1994, 352-355
	ATTTTTTTT	CROMIE, "Scientists Bind Matter With Light", Harvard University Gazette, October 13, 1989, 1, 4-5
	AUUUUUUUU	DAVIES et al., "Optically Controlled Collisions Of Biological Objects", SPIE, 3260, January 25-28, 1998, 15-22

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	



Substitute Form PTO-1449 (Prescribed)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 15670-036001	Application No. 09/917,139
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Mihrimah Ozkan et al.	
		Filing Date July 26, 2001	Group Art Unit 2881

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	AVVVVVVVVV	DHOLAKIA et al, "Optical Tweezers: The Next Generation", Physics World, October 2002, 31-35
	AWWWWWWWWW	DUFRESNE et al, "Optical Tweezer Arrays & Optical Substrates Created With Diffractive Optics", Review Of Scientific Instruments, 69, 5, May 1998, 1974-1977
	AXXXXXXXXXX	ESENER, "Center For Chips With Heterogeneously Integrated Photonics (CHIPS), DARPA Opto Centers Kickoff, 11/08/00, Dana Point, CA
	AYYYYYYYYY	FALLMAN et al., "Design For Fully Steerable Dual Trap Optical Tweezers", Applied Optics, 36, 10, April 1, 1997, 2107-2113
	AZZZZZZZZZ	FISHER, "The Light That Binds", Popular Science, January 1990, 24-25
	AAAAAAAAAAAA	FLYNN et al, "Parallel Transport Of Biological Cells Using Individually Addressable VCSEL Arrays As Optical Tweezers", Sensors & Actuators B, 87, 2002, 239-243
	ABBBBBBBBBBB	FOURNIER et al., "Writing Diffractive Structures By Optical Trapping", SPIE, 2406, February 6-8, 1995, 101-112
	ACCCCCCCCC	FU et al, "A Microfabricated Fluorescence Activated Cell Sorter", Nature Biotechnology, 17, November 1999, 1109-1111
	ADDDDDDDDD	GASCOYNE, website printout, December 1, 2000
	AEEEEEEEEEE	GORRE-TALINI et al, "Sorting Of Brownian Particles By The Pulsed Application Of A Asymmetric Potential", Physical Review E, 56, 2, August 1997, 2025-2034
	AFFFFFFFFF	GRIER, "New Age Crystals", Nature, 389, 6653, October 23, 1997, 784-785
	AGGGGGGGGG	GREULICH et al, "The Light Microscope On Its Way From An Analytical To A Preparative Tool", Journal Of Microscopy, 167, Pt. 2, August 1, 1992, 127-151
	AHHHHHHHHH	GURRIERI et al, "Imaging Of Kinked Configurations Of DNA Molecules Undergoing Orthogonal Field Alternating Gel Electrophoresis By Fluorescence Microscope", Biochemistry, 29, 13, April 3, 1990, 3396-3401
	AIIIIIIII	GURRIERI et al. Trapping Of Megabase Sized DNA Molecules During Agarose Gel Electrophoresis", Proc. Natl. Acad. Sci. USA, 96, January 1999, 453-458
	AJJJJJJJJ	HOLTZ et al, "Polymerized Colloidal Crystal Hydrogel Films As Intelligent Chemical Sensing Materials", Nature, 389, October 23, 1997, 829-832
	AKKKKKKKKK	HOUSEAL et al, "Imaging Of The Motions & Conformational Transitions Of Single DNA Molecules Using Fluorescence Microscopy", Biophys.J., 55, 324, February 12-16, 1989, 373a
	ALLLLLLLLL	HOUSEAL et al., "Real Time Imaging Of Single DNA Molecules With Fluorescence Microscopy", Biophys.J., 56, September 1989, 507-516
	AMMMMMMMMM	HUBER et al., "Isolation Of A Hyperthermophilic Archaeum Predicted By in situ RNA Analysis", Nature, 376, 6535, July 6, 1995, 57-58.
	ANNNNNNNNN	IMASAKA et al., "Optical Chromatography", Analytical Chemistry, 67, 11, June 1, 1995, 1763-1765
	AOOOOOOOOO	INSIDE R&D, "Matter Bound By Light", Inside R&D, 18, 43, October 25, 1989, 2
	APPPPPPPPP	KUO et al., "Optical Tweezers In Cell Biology", Trends In Cell Biology, 2, April 1992, 116-118.

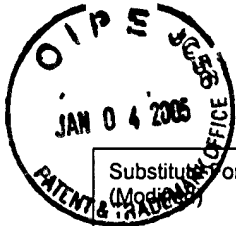
Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	



Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 15670-036001	Application No. 09/917,139
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Mihrimah Ozkan et al.	
		Filing Date July 26, 2001	Group Art Unit 2881

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	AQQQQQQQQQ	LAI, "Determination Of Spring Constant Of Laser Trapped Particle By Self-Mining Interferometry, Proc. Of SPIE, 3921, 2000, 197-204.
	ARRRRRRRRR	LAW, "Matter Rides On Ripples Of Light", New Scientist, 1691, November 18, 1989, 1691
	ASSSSSSSSS	LEGER et al, "Coherent Laser Addition Using Binary Phase Gratings", Applied Optics, 26, 20, October 15, 1987, 4391-4399
	ATTTTTTTTT	LI, et al.; Transport, Manipulations, and Reaction of Biological Cells On-Chip Using Electrokinetic Effects; April 15, 1997; Analytical Chemistry, Vol. 69, No. 8, pgs. 1564-1568.
	AUUUUUUUUU	MAMMEN et al, "Optically Controlled Collisions Of Biological Objects To Evaluate Potent Polyvalent Inhibitors Of Virus-Cell Adhesion", Chemistry & Biology, 3, 9, September 1996, 757-763.
	AVVVVVVVVV	MASON et al, "Optical Measurements Of Frequency Dependent Linear Viscoelastic Moduli Of Complex Fluids", Physical Review Letters, 74, 7, February 13, 1995, 1250-1253
	WWWWWWWWW	McCLELLAND et al, "Low Frequency Peculiarities Of The Photorefractive Response In Sillenites", Optics Communications, 113, January 1, 1995, 371-377
	AXXXXXXXXXX	MIHRIMAH et al.; Heterogeneous Integration through Electrokinetic Migration; November/December 2001; IEEE Engineering in Medicine and Biology; pgs. 144-151
	AYYYYYYYYYY	MISAWA et al, "Spatial Pattern Formation, Size Selection, & Directional Flow Of Polymer Latex Particles By Laser Trapping Technique", Chemistry Letters, 3, March 1991, 469-472
	AZZZZZZZZZ	MISAWA et al, "Multibeam Laser Manipulation & Fixation Of Microparticles", Appl.Phys.Lett., 60, 3, January 20, 1992, 310-312
	AAAAAAAAAAAA	MITCHELL et al, "A Practical Optical Trap For Manipulating & Isolating Bacterial from Complex Microbial Communities", Microb.Ecol., 25, 2, 1993, 113-119
	ABBBBBBBBBBB	MURRAY et al, "Experimental Observation Of Two Stage Melting In A Classical Two Dimensional Screened Coulomb System", Physical Review Letters, 58, 12, March 23, 1987, 1200-1203.
	ACCCCCCCCCC	MURRAY et al, "Colloidal Crystals", American Scientist, 83, 3, May-June 1995, 238-245
	ADDDDDDDDDD	MYCOMETRIX, website printout, www.mycometrix.com, December 1, 2000
	AEEEEEEEEEEE	NEW YORK TIMES, "Atoms Bound Together By Light", New York Times, October 31, 1989, C17
	AFFFFFFFFFFF	PATERSON et al, "Controlled Rotation Of Optically Trapped Microscopic Particles", Science, 292, May 4, 2001, 912-914
	AGGGGGGGGGG	PRITCHARD et al., "Light Traps Using Spontaneous Forces", Physical Review Letters, 57, 3, July 21, 1986, 310-313
	AHHHHHHHHHH	QUAKE et al, "From Micro- to Nanofabrication With Soft Materials", Science, 290, November 24, 2000, 1536-1540
	AIHHHHHHH	RAAB et al, "Trapping Of Neutral Sodium Atoms With Radiation Pressure", Physical Review Letters, 59, 23, December 7, 1987, 2631-2634

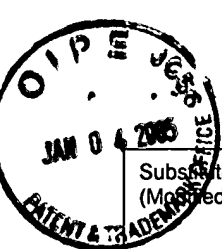
Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	



Substitute Form PTO-1449 (Modified 10/2004)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 15670-036001	Application No. 09/917,139
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Mihrimah Ozkan et al.	
		Filing Date July 26, 2001	Group Art Unit 2881

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	AJJJJJJJJJ	ROGOVIN et al, "Bifurcation In Degenerate Four-Wave Mixing In Liquid Suspensions Of Microspheres", Physical Review Letters, 54, 20, May 20, 1985, 2222-2225
	AKKKKKKKKKK	ROOSEN, "A Theoretical & Experimental Study Of The Stable Equilibrium Positions Of Spheres Levitated By Two Horizontal Laser Beams", Optics Communications, 21, 1, April 1977, 189-194
	ALLLLLLLLLLL	SASAKI et al, "Laser Scanning Micromanipulation & Spatial Patterning Of Fine Particles", Japanese Journal Of Applied Physics, 31, 5B, May 1991, L907-L909
	MMMMMMMMMMM	SASAKI et al., "Optical Micromanipulation Of A Lasing Polymer Particle In Water", Japanese Journal Of Applied Physics, Pt. 2, 32, 8B, August 15, 1993, L1144-L1147
	ANNNNNNNNNN	SASAKI et al, "Optical Trapping Of A Metal Particle & A Water Droplet By A Scanning Laser Beam", Appl. Phys. Lett., 60, 7, February 17, 1992, 807-809
	AOOOOOOOOOO	SHIKANO et al, "Separation Of A Single Cell By Red-Laser Manipulation", Applied Physics Letters, 75, 17, October 25, 1999, 2671-2673
	APPPPPPPPPP	SMITH et al, "Four Wave Mixing In An Artificial Kerr Medium", Optics Letters, 6, 6, June 1981, 284-286
	AQQQQQQQQQQ	SMITH et al, "Direct Mechanical Measurements Of The Elasticity Of Single DNA Molecules By Using Magnetic Beads", Science, 258, 5085, November 13, 1992, 1122-1126
	ARRRRRRRRRR	SMITH et al, "Model & Computer Simulations Of The Motion Of DNA Molecules During Pulsed Field Gel Electrophoresis", Biochemistry, 30, 21, May 28, 1991, 5264-5274
	ASSSSSSSSSS	SONEK et al, "Micromanipulation & Physical Monitoring Of Cells Using Two-Photon Excited Fluorescence In CW Laser Tweezers", SPIE, 2678, January 28-February 1, 1996, 62-68
	ATTTTTTTTTT	SUZUKI et al, "Hysteric Behavior & Irreversibility Of Polymer Gels By pH Change", J. Chem. Phys., 103, 11, September 15, 1995, 4706-4710
	AUUUUUUUUUU	SUZUKI et al., "Optical Switching In Polymer Gels", J. Appl. Phys., 80, 1, July 1, 1996, 131-136
	AVVVVVVVVVV	SVOBODA et al, "Biological Applications In Optical Forces", Annu .Rev. Biophys. Biomol. Struct., 23, 1994, 247-285
	WWWWWWWWW	SVOBODA et al, "Conformation & Elasticity Of The Isolated Red Blood Cell Membrane Skeleton, Biophys. J., 63, 3, September 1, 1992, 784-793
	AXXXXXXXXXXX	SWANSON et al, "Diffractive Optical Elements For Use In Infrared Systems", Optical Engineering, 28, 6, June 1989, 605-608
	AYYYYYYYYYY	SWANSON, et al., A fully multiplexed CMOS biochip for DNA analysis; 2000; Sensors and Actuators B 64; pgs. 22-30
	AZZZZZZZZZZ	TAKASHIMA et al., "Dielectric Dispersion Of DNA", J. Mol. Biol., 7, 5, November 1963, 455-467
	AAAAAAAAAAAA	THIRUNAMACHANDRAN, "Intramolecular Interactions In The Presence of An Intense Radiation Field", Molecular Physics, 40, 2, 1980, 393-399

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	



Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 15670-036001	Application No. 09/917,139
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Mihrimah Ozkan et al.	
		Filing Date July 26, 2001	Group Art Unit 2881

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	ABBBBBBBBBBB	UNGER et al, "Monolithic Microfabricated Valves & Pumps By Multilayer Soft Lithography", Science, 288, April 7, 2000, 113-116
	ACCCCCCCCCC	VANBLAADEREN et al, "Template Directed Colloidal Crystallization", Nature, 385, 6614, January 23, 1997, 321-324
	ADDDDDDDDDDD	VISSCHER et al, "Construction Of Multiple Beam Optical Traps With Nanometer Resolution Position Screening", IEEE Jnl Of Selected Topics In Quantum Electronics, 2, 4, December 1996, 1066-1075
	AEEEEEEEEEEE	WANG et al, "Integration Of Optoelectronic Array Devices For Cell Transport & Sorting", Photonics West 2001, January 20-26, 2001, San Jose, CA
	AFFFFFFFFFFF	WEBER et al, "Manipulation Of Cells, Organelles & Genomes By Laser Microbeam & Optical Trap", Intl. Rev. Of Cytology, 133, 1992, 1-41, (Academic Press: San Diego).
	AGGGGGGGGGGG	WEI et al, "Laser Trapping Microscopy As A Diagnostic Technique For The Study Of Cellular Response & Laser-Cell Interactions, SPIE, 2983, February 10-11, 1997, 22-28
	AHHHHHHHHHHH	WESTBROOK et al, "Localization Of Atoms In A Three Dimensional Standing Wave", Physical Review Letters, 65, 1, July 2, 1990, 33-36
	AMMMMMMM	WHEELER, "Force Fields Of Laser Light Bind Molecules In A Remarkable Discovery At Harvard", The Chronicle Of Higher Education, October 25, 1989, A4
	AJJJJJJJJJJ	WRIGHT et al, "Radiation Trapping Forces On Microspheres With Optical Tweezers", Appl. Phys. Lett., 63, 6, August 9, 1993, 715-717
	AKKKKKKKKKKK	WUITE et al, "An Integrated Laser Trap/Flow Control Video Microscope For The Study Of Single Biomolecules", Biophys. Jnl., 79, 2, August 2000, 1155-1167
	ALLLLLLLLLLL	XIANG et al, "A Combinatorial Approach To Materials Discovery", Science, 268, 5218, June 23, 1995, 1738-1740
	AMMMMMMMMMMM	YABLONOVITCH, "Inhibited Spontaneous Emission In Solid State Physics & Electronics", Physical Review Letters, 58, 20, May 18, 1987, 2059-2062
	ANNNNNNNNNNN	YABLONOVITCH et al, "Photonic Band Structure: The Face Centered Cubic Face", Physical Review Letters, 63, 18, October 30, 1989, 1950-1953
	AOOOOOOOOOOO	YUQIU, "Mechanical, Electrical, & Chemical Manipulation Of Single DNA Molecules", Nanotechnology, 3, 1992, 16-20
	APPPPPPPPPPP	ZAHN et al, "Fluorimetric Multiparameter Cell Assay At The Single Cell Level Fabricated By Optical Tweezers", FEBS Letters, 443, 1999, 337-340
	AQQQQQQQQQQQ	ZEIDLER; Automated chromosome analysis; August 1988; Nature, vol. 334, No. 6183; pg. 635

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	